

# Community Paramedicine

## Evaluation Tool

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# **SELF-ASSESSMENT FOR COMMUNITY PARAMEDICINE PLANNING, DEVELOPMENT, AND EVALUATION**

## **Background**

Community Paramedicine is an emerging field in health care where EMTs and Paramedics operate in expanded roles in an effort to connect underutilized resources to underserved populations. Although EMTs and Paramedics have operated in expanded roles in several foreign countries, such as Canada, England, and New Zealand, for many years, in the U.S. the concept first came to the attention of the EMS community, particularly the rural EMS community, with the publication of the Rural and Frontier EMS Agenda for the Future in 2004 (Appendix D: Additional Resources). That document described community paramedicine as a potential framework that might allow rural communities to transition from largely volunteer EMS agencies to ones with at least some full time staff based not solely on their emergency response but on the other community health roles. The Rural and Frontier EMS Agenda for the Future defined community paramedicine as “an organized system of services, based on local need, which are provided by EMTs and Paramedics integrated into the local or regional health care system and overseen by emergency and primary care physicians. This not only addresses gaps in primary care services, but enables the presence of EMS personnel for emergency response in low call-volume areas by providing routine use of their clinical skills and additional financial support from these non-EMS activities.”

Because community paramedicine programs expand the roles of EMS professionals to provide health services where access to physicians, clinics and/or hospitals may be difficult, there has been significant movement toward the implementation of such programs across rural America. Additionally, there have been programs that have evolved in more urban areas that serve a similar role in the provision of community health/public health activities. In rural areas community paramedicine programs are often focused on efficiently allocating scarce health care resources and improving access to care in these underserved areas. In urban areas, many community paramedicine programs have been designed to keep “frequent fliers” out of the emergency care system by ensuring their health care needs are met in other ways. Many programs, both rural and urban, take health care into the patient’s home.

Community paramedicine programs might focus on specific medical needs such as diabetic monitoring or on broader health care issues such as mental health. Most importantly, each of the successful programs now in place across the country was uniquely and specifically designed to meet one or more health care needs essential to that community. Additionally, successful programs capitalize on linkages, collaboration and integration with other health care resources in the community.

Given the emergence of community paramedicine programs in the U.S., key organizational and government leaders felt that by establishing a common evaluation framework the growth and development of these community paramedicine programs could be captured and described. In

capturing such data in a standardized way, the characteristics and best practices of early successful adopters can be emulated by emerging programs.

While the assessment tool contained in this document is designed to allow existing programs to conduct self-assessments across the broad public health elements of assessment, policy development and assurance, the tool also serves as a potential framework to guide in the development of new community paramedicine programs. By looking at each indicator the leadership of potential community paramedicine programs will be more likely to include, or at least consider, all of the elements that seem to be common in successful programs.

## **Introduction**

In the absence of validated national benchmarks, or norms, this document stresses the need for each community paramedicine program to define its system-specific health status benchmarks and performance indicators and to use a variety of community health and public health interventions to improve the community's health status. The document also addresses reducing the burden of illness, chronic disease, and injury as a community-wide public health problem, not strictly as a patient care issue.

Opportunities to review community paramedicine programs are beneficial because they allow for the assessment of the status of EMS activities and move systems forward in developing inclusive and comprehensive systems of care. Many EMS programs conduct their own internal or external reviews, and it is hoped that this document will serve as another tool used by these programs to assess the current status of community paramedicine programs and to provide guidance on future system enhancements.

The assessment tool also provides a common framework by which data can be collected from multiple community paramedicine programs and aggregated to develop a snapshot of common successes and challenges. While the tool should be useful across both urban and rural programs it is specifically designed to address rural settings where community health/public health resources are often very limited. By encouraging emerging rural community paramedicine programs to use this evaluation framework as a planning tool, it should be possible to create stronger partnerships and linkages with scarce rural resources.

The tool that follows was developed using a consensus-based process by a group of experts representing key national organizations and existing community paramedicine programs. The group consulted with a number of community paramedicine programs in both rural and urban settings to better understand their depth, breadth and scope (a brief description of the programs consulted can be found in Appendix C). Given the community health/public health nature of the community paramedicine efforts that emerged from those discussions, an evaluation framework common to public health was ultimately selected as the structure for the evaluation tool.

Because the services and activities of community paramedicine programs are so closely linked to public health issues, approaches and terminology familiar to public health are used in this evaluation tool. The benchmarks, indicators and scoring criteria contained in the assessment tool are organized in a classic public health circle. There are three core functions of public health: assessment, policy development, and assurance. There are ten essential services of public health that fall within the three core functions. These core functions and essential services are supported by research and infrastructure elements. Figure 1 illustrates the three core functions and ten essential services of public health.

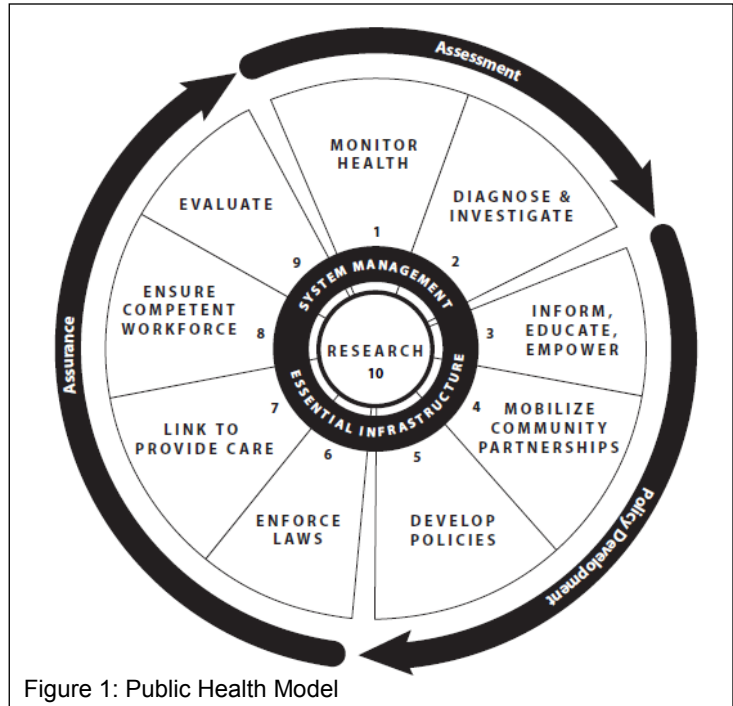


Figure 1: Public Health Model

## Using the Tool

This objective community paramedicine self-assessment tool can be used by communities that wish to assess the current status of their paramedicine program. It is recommended that a group consisting of key representatives from the community including public health, hospital, primary care, regulatory agencies, EMS and other health care and social service areas impacted by the community paramedicine program, be assembled to form a multi-disciplinary advisory committee. How a question is answered will depend on a group agreement on the program being assessed. Such an agreement is essential to ensuring consistency among participants during the assessment. Once there is agreement among the group about what is being rated in each section, the tool can aid in identifying and prioritizing areas that need attention. It also provides the State lead agency with guidance on community paramedicine next steps or improvements to be made along a continuum of a maturing and developing EMS system. Many of the benchmarks and indicators are qualitative, and will require judgment and discretion by those completing the assessment—a recognized limitation of this methodology.

Communities considering the development of a community paramedicine program are also encouraged to use the process as a planning tool. In this case the group should not score the tool but rather study each benchmark and indicator to determine which ones are applicable to their program and how the indicator will be addressed in the future. By undertaking this exercise the program planners may well be reminded of aspects of the program that might, otherwise, be overlooked at the outset.

Within each core function (assessment, policy development, and assurance) are a variety of

benchmarks. These benchmarks are based on current literature on community paramedicine program development, interviews with existing community paramedicine programs, and public health systems. For each benchmark, a number of indicators further define the benchmark. Scoring for each indicator is defined to assist in identifying progress, efforts, or compliance, or any combination of these. Each indicator contains a scoring-mechanism ordering of statements to assess progress to date. The following criteria are used to assess progress in complying with each indicator.

Score	Progress Scoring
0	Not known
1	No
2	Minimal
3	Limited
4	Substantial
5	Full

The following table provides an example of how the above criteria are used to assess community paramedicine program progress for a specific indicator.

Table 1. Example of Scoring

Indicator	Scoring
<p><b>101.1:</b> There is a description of illnesses and injuries within the community paramedicine service area including the distribution by geographic area, high-risk populations (pediatric, elder, distinct cultural/ethnic, rural, and others), incidence, prevalence, contributing factors, determinants, morbidity, and patient distribution using any or all of the following: vital statistics, emergency department (ED) data, EMS data, hospital discharge data, State police data (those from law enforcement agencies), medical examiner data, and other data sources. The description is updated at regular intervals.</p>	<ol style="list-style-type: none"> <li>0. Not known. The scorer does not know enough about the indicator to evaluate it effectively.</li> <li>1. There is no written description of illness and injuries within the community paramedicine service area.</li> <li>2. One or more population-based data sources (e.g., vital statistics) describe illness and injury within the jurisdiction, but clinical data sources are not used.</li> <li>3. One or more population-based data sources and one or more clinical data sources are used to describe illness and injury within the jurisdiction.</li> <li>4. Multiple population-based and clinical data sources are used to describe illness and injury within the jurisdiction, and the description is systematically updated at regular intervals.</li> <li>5. Multiple population-based and clinical data sources (e.g., ED data, hospital discharge data, and others) are electronically linked and used to describe illness and injury within the jurisdiction.</li> </ol>

The rater would review the criteria listed and select the one that best describes the program's current ability to describe injury and illness in their service area ranging from none in newly developing systems to very complex analyses that can help frame future community paramedicine interventions.

It is important to note that a program must complete all of the criteria associated with previous scores before being awarded a higher score. As an example, a program should not score itself a 4 if it has not met all of the criteria outlined in 1-3.

## **The Optimal Scoring Process**

Based on nearly a decade of experience in using a similar tool contained in the HRSA Model Trauma System Planning and Evaluation document to evaluate trauma programs (Appendix D: Additional Resources), the most effective method of conducting the evaluation is to have each member of the multi-disciplinary advisory committee score the program independently.

Following that, a facilitated meeting that assists the group as a whole to come to consensus on each score should be conducted. This allows for each member to hear varying perceptions and breaks down communication silos, providing for a broad-based understanding of the program for all members. At that same, or a subsequent meeting, the group should analyze the results and prioritize areas in which they would like to see improvements. These foci should become part of a strategic/tactical plan for the program and a commitment to re-evaluate the program on a periodic basis (every 1-2 years) should be made.

Many evaluation or assessment criteria used by EMS professionals as they relate to patient care must be repeated at various intervals to be of the greatest value. Just as a single Glasgow coma score is meaningless in the long-term evaluation of someone with a head injury, so too will be a single application of this tool. The best uses of this tool are as a process to help identify where the program is at this moment in time, establish future benchmarks to strive towards (for instance moving a score from a 2 to a 4 in a certain area), and then to re-measure to determine the overall progress and evolution of the program. No program is likely to score a 5 on each indicator. There are a myriad of issues specific to the geographic area's politics and resources that might preclude a high score for one or more indicators. That should be noted and attentions turned elsewhere where true and lasting progress can be made. This tool provides one way of measuring, documenting and quantifying that effort over time.

It is important to remember that the intent of the tool is to allow an individual community paramedicine program to identify its own strengths and weaknesses, prioritize activities, and measure progress against itself over time. Additionally, the tool is seen as a planning document that can assist developing programs. The tool is not intended to measure one community paramedicine program against another.

## **Interpreting the Score**

At first glance it might appear that it would be possible to add all of the scores together and come up with an aggregate score for the program, or to use the average (mean) response. Because the scores are derived from a consensus-based process which is inherently subjective and since the numbers are rank ordered, programs must use caution in analyzing the scores. The following section summarizes the appropriate use for the scores. That use is, primarily, to serve as a way to measure progress within a single community paramedicine program over time through a repeated measures process.



## Benchmark 101

*There is a thorough description of the epidemiology of the medical conditions targeted by the community paramedicine program in the service area using both population-based data and clinical databases.*

Indicator	Score
Indicator 101.1	5
Indicator 101.2	3
Indicator 101.3	2
<b>Median Score Expectation 101</b>	<b>3</b>

In this benchmark, the median score of “3” would indicate that, overall, there is evidence of limited, but demonstrable progress in meeting the expectation. The same process can be used for each of the core functions of assessment, policy development and assurance; e.g., the median for each of these can be similarly calculated. The key is to achieve consensus on each score prior to calculating the median.

## Limitations

Although this scoring mechanism provides a quantitative descriptor of each indicator and, ultimately, of the entire community paramedicine program, the scoring process has a number of methodological limitations:

- The benchmarks focus primarily on process measures, not on outcomes. It is assumed that meeting these process measurements will result in improved outcomes.
- The self-assessment is but *one* tool to use in assessing the progress a program has made in meeting the above-referenced benchmarks and indicators. Any community paramedicine program review should include outcome measures (such as improvements in individual health measures, decreases in return visits to the emergency department, etc.) as a full measure of system performance.
- While this evaluation methodology is designed to be as objective as possible, it still relies on the qualitative judgments of those completing the assessment.
- The data presented are rank ordered. Therefore, it is not possible to do parametric statistical analysis such as a mean.

## 100: Assessment

**Regular systematic collection, assembly, analysis, and dissemination of information on the health of the community.**

**Benchmark 101:** *There is a thorough description of the epidemiology of the medical conditions targeted by the community paramedicine program in the service area using both population-based data and clinical databases.*

Indicator	Scoring
<p><b>101.1</b> There is a description of illnesses and injuries within the community paramedicine service area including the distribution by geographic area, high-risk populations (pediatric, elder, distinct cultural/ethnic, rural, and others), incidence, prevalence, contributing factors, determinants, morbidity, and patient distribution using any or all of the following: vital statistics, emergency department (ED) data, EMS data, hospital discharge data, State police data (those from law enforcement agencies), medical examiner data, and other data sources. The description is updated at regular intervals.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no written description of illness and injuries within the community paramedicine service area.</p> <p><b>2.</b> One or more population-based data sources (e.g., vital statistics) describe illness and injury within the jurisdiction, but clinical data sources are not used.</p> <p><b>3.</b> One or more population-based data sources and one or more clinical data sources are used to describe illness and injury within the jurisdiction.</p> <p><b>4.</b> Multiple population-based and clinical data sources are used to describe illness and injury within the jurisdiction, and the description is systematically updated at regular intervals.</p> <p><b>5.</b> Multiple population-based and clinical data sources (e.g., ED data, hospital discharge data, and others) are electronically linked and used to describe illness and injury within the jurisdiction.</p>

Indicator	Scoring
<p><b>101.2</b> Collaboration exists between the community paramedicine program, public health officials, and health system leaders to complete risk assessments.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> No illness/injury risk assessments are conducted.</p> <p><b>2.</b> Community paramedicine officials conduct illness/injury assessments; however, there is no involvement of the broader health care community or public health officials in those assessments.</p> <p><b>3.</b> Public health officials, along with health care and community paramedicine participants, assist with the design of illness/injury risk assessments.</p> <p><b>4.</b> Public health officials, along with health care and community paramedicine participants, assist with the design and analysis of illness/injury risk assessments.</p> <p><b>5.</b> The public health epidemiologist, along with health care and community paramedicine participants, is involved in the development of illness/injury reports. There is clear evidence of data sharing, data linkage, and well-defined reporting roles and responsibilities.</p>
<p><b>101.3</b> There is an established electronic information system (EIS) for ongoing targeted surveillance and system performance assessment. The community paramedicine EIS may be freestanding or an extension/adaptation of other databases (e.g. EMS or hospital).</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> A community paramedicine EIS exists as an extension of other databases, e.g. EMS or hospital, but it is not routinely used for targeted surveillance and system performance.</p> <p><b>2.</b> The community paramedicine EIS is used to inform performance improvement activities but is not used in any community surveillance activities.</p> <p><b>3.</b> The community paramedicine EIS is used for both surveillance and performance improvement activities.</p> <p><b>4.</b> The community paramedicine EIS has been integrated or linked to one or more administrative databases, e.g. billing.</p> <p><b>5.</b> The community paramedicine EIS is linked to both administrative and clinical databases to provide a comprehensive overview of the community paramedicine program and its effect on current and future community healthcare needs.</p>

Indicator	Scoring
<p><b>101.4</b> The EIS database captures all patient/client contacts.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no database that captures patient/client contacts.</p> <p><b>2.</b> There is a simple log (electronic or paper based) that identifies demographic information about the patient/client contact, e.g. patient and provider identifier, date, time, etc.</p> <p><b>3.</b> There is a medical record that documents each patient/client contact with summary information in an electronic searchable database of all contacts.</p> <p><b>4.</b> There is an electronic medical record documentation of each patient/client contact that can be accessed by primary care physicians and case managers.</p> <p><b>5.</b> The community paramedicine electronic medical record is fully integrated with the patient/client's formal health care record in the patient/client's medical home.</p>
<p><b>101.5</b> Reports can be generated from the community paramedicine EIS to help guide performance improvement activities and to document the effectiveness and/or efficiency of the program.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> No community paramedicine EIS database exists.</p> <p><b>2.</b> A community paramedicine EIS database exists but is not used to generate reports to guide either daily operations or future planning.</p> <p><b>3.</b> Special reports can be generated as needed and used by the program director to assist in scheduling or other administrative issues.</p> <p><b>4.</b> Reports are generated on a regular basis and used by the program director and medical director to inform performance improvement activities and processes.</p> <p><b>5.</b> Reports are generated on a regular basis and are used to inform oversight bodies, funding agencies, and the general public about the impact of the community paramedicine program.</p>

**Benchmark 102:** *A resource assessment for the community paramedicine program has been completed and is regularly updated.*

Indicator	Scoring
<p><b>102.1</b> The community paramedicine program has completed a comprehensive inventory that identifies the availability and distribution of current capabilities and resources from a variety of partners and organizations throughout the community.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no community-wide resource assessment.</p> <p><b>2.</b> A community-wide resource assessment has been completed that documents the frequency and distribution of resources for at least two of the following categories: community paramedicine, prehospital and hospital personnel, education programs, facilities, and prehospital equipment.</p> <p><b>3.</b> A community-wide resource assessment has been completed that documents the frequency and distribution of resources for more than two of the following categories: leadership, system development, regulation, finances, illness/injury prevention, wellness promotion, workforce resources, education, EMS, transport, communications, health care facilities, medical oversight, system evaluation, performance improvement, and research.</p> <p><b>4.</b> The community-wide resource assessment has identified one or more targeted clinical condition groups/individuals that can be addressed with the resources identified above.</p> <p><b>5.</b> The community-wide resource assessment has identified strategies to meet the needs of the targeted clinical condition groups/individuals and methods for supporting those activities financially.</p>

Indicator	Scoring
<p><b>102.2</b> The community paramedicine program has completed a gap analysis based on the inventories of internal and external system resources as well as system resource standards.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There are no resource standards on which to base a gap analysis.</p> <p><b>2.</b> The community paramedicine advisory committee has begun to develop resource standards so that a gap analysis can be completed.</p> <p><b>3.</b> The community paramedicine resource standards have been approved by the appropriate authority.</p> <p><b>4.</b> A gap analysis of community paramedicine program has been completed based on the adopted resource standards.</p> <p><b>5.</b> A gap analysis of community paramedicine resources has been completed and is updated at regular intervals based on the adopted resource standards.</p>
<p><b>102.3</b> There has been an initial assessment (and periodic reassessment) of overall program effectiveness.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There has not been an assessment of the effectiveness of the community paramedicine program.</p> <p><b>2.</b> There has been at least one formal written assessment of the effectiveness of the community paramedicine program.</p> <p><b>3.</b> Program effectiveness is assessed on at least an annual basis and formal reports are generated.</p> <p><b>4.</b> There is an ongoing program assessment and formal reports are published annually and distributed to all stakeholders including: patients/clients, oversight bodies, funding sources, and the general public.</p> <p><b>5.</b> There is ongoing assessment of multiple program objective outcomes over time as the outcomes relate to changes within the program for specific program interventions.</p>

Indicator	Scoring
<p><b>102.4</b> The community paramedicine program has undergone an external independent analysis of all aspects of the program.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> No external examination of the community paramedicine program overall or individual components has occurred.</p> <p><b>2.</b> An external assessment is in the planning stages.</p> <p><b>3.</b> An external assessment is scheduled and/or has been completed and the agency is awaiting the formal report.</p> <p><b>4.</b> An outside group of community paramedicine system “experts” has conducted a formal community paramedicine external assessment and has made specific recommendations to the system.</p> <p><b>5.</b> Independent external reassessment occurs regularly, at least every 5 years.</p>

**Benchmark 103:** *The community paramedicine program assesses and monitors its value to its constituents in terms of cost-benefit analysis and societal investment.*

Indicator	Scoring
<p><b>103.1</b> The benefits of the community paramedicine program, in terms of cost savings, decreased EMS transports, decreased hospital visits, improved health/wellness, and so on, are described.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There are no cost data from the EIS database, or other sources, available to calculate the program’s benefits.</p> <p><b>2.</b> Community paramedicine costs are included in the EIS that can serve as the basis for these calculations.</p> <p><b>3.</b> Additional sources of data, in terms of other economic and quality of life measures, (e.g., reduction in return hospital visits / readmissions, fewer 911 calls, shorter return to work interval, etc.) are available.</p> <p><b>4.</b> Cost and quality of life measures can be analyzed and presented in descriptive and graphic form.</p> <p><b>5.</b> A series of reports and fact sheets are available and regularly updated to descriptively and graphically illustrate the costs and benefits of the community paramedicine program.</p>

Indicator	Scoring
<p><b>103.2</b> Cases that document the societal benefit are reported on so the community sees and hears the benefit of the community paramedicine program while simultaneously protecting patient privacy.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> No effort is made to gather, catalogue, or report cases that document the benefits of the community paramedicine program so that the community sees and hears the benefit of the program to society.</p> <p><b>2.</b> Dramatic improvements in wellness and functional outcome returns are documented sporadically or within various components of the program.</p> <p><b>3.</b> Cases concerning dramatic improvements in wellness and return to a quality life are on file (at a system level) but not reported unless asked for by the press.</p> <p><b>4.</b> Cases concerning dramatic improvements in wellness and return to a quality life are on file (at a system level) and are reported to the press.</p> <p><b>5.</b> Cases are used as part of information fact sheets that are distributed to the press and other segments of the community. These information fact sheets document the cost-benefit of the community paramedicine program to the community.</p>
<p><b>103.3</b> An assessment of the interests of public officials concerning community paramedicine program information has been conducted and communications mechanism developed based on the results of the assessment.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no routine or planned contact with the public officials.</p> <p><b>2.</b> Plans are in place to feed information to public officials in response to a particular event.</p> <p><b>3.</b> Public officials have been formally asked about what types of information would be helpful in reporting on community paramedicine and community health issues.</p> <p><b>4.</b> Information resources for public officials have been developed, based on the stated needs of the public officials; public official representatives are included in community paramedicine informational events.</p> <p><b>5.</b> In addition to routine public official contact, public officials are involved in various oversight activities such as the community paramedicine advisory council.</p>



Indicator	Scoring
<p><b>103.4</b> An assessment of the needs of health insurers/payers concerning community paramedicine program information has been conducted and communications mechanism developed based on the results of the assessment</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no routine or planned contact with health insurers/payers.</p> <p><b>2.</b> Plans are in place to provide information to health insurers/payers during a response to a particular payment, reimbursement, and cost issue.</p> <p><b>3.</b> Health insurers/payers have been formally asked about what types of information would be helpful in reporting on community paramedicine cases and issues to assist them in payment determinations.</p> <p><b>4.</b> Information resources for health insurers/payers have been developed based on the stated needs of the insurers; insurance representatives/payers are included in community paramedicine informational events.</p> <p><b>5.</b> In addition to routine contact, health insurers/payers are involved in various oversight activities such as the community paramedicine advisory councils.</p>
<p><b>103.5</b> An assessment of the needs of the general medical community, including physicians, nurses, prehospital care providers, and others, concerning community paramedicine program information has been conducted and communications mechanism developed based on the results of the assessment.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no routine or planned contact with the broad medical community.</p> <p><b>2.</b> Plans are in place to provide information to the broad medical community in response to a community paramedicine event or issue.</p> <p><b>3.</b> The broad medical community has been formally asked about what types of information would be helpful in reporting on community paramedicine events and issues.</p> <p><b>4.</b> Information resources for the general medical community have been developed based on the stated needs of the general medical community; general medical community representatives are included in community paramedicine informational events.</p> <p><b>5.</b> In addition to routine contact, the broad medical community is involved in various oversight activities such as the community paramedicine advisory council.</p>

## 200: Policy Development

**Promoting the use of scientific knowledge in decision making that includes building constituencies, identifying needs and setting priorities, legislative authority and funding to develop plans and policies to address needs, and ensuring the public’s health and safety.**

**Benchmark 201:** *Comprehensive statutory authority and administrative rules support community paramedicine program infrastructure, planning, provision, oversight, and future development.*

Indicator	Scoring
<p><b>201.1</b> Community paramedicine activities are allowable/supportable within EMS regulations, licensure, certification, and scope of practice.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> No effort has been made to inform the state EMS agency concerning community paramedicine program activities to determine if such activities are allowable within the state’s regulations.</p> <p><b>2.</b> The state EMS agency has been made aware of the community paramedicine program but has not confirmed that the program is operating within state regulations.</p> <p><b>3.</b> The EMS agency has approved the community paramedicine program on a “pilot” or other restricted basis.</p> <p><b>4.</b> The EMS agency has approved the community paramedicine program without any restrictions.</p> <p><b>5.</b> Specific statutes, rules, and regulations govern community paramedicine programs statewide.</p>

Indicator	Scoring
<p><b>201.2</b> The community paramedicine program is not in conflict with other licensing agencies or authorities, including: nursing, physician assistants, home health care, primary care, or others.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> No effort has been made to inform the state regulatory agencies governing nursing, advanced practice nurses, physician assistants, home health care providers, primary care, or others concerning community paramedicine program activities to determine if such activities are allowable within the state's regulations.</p> <p><b>2.</b> The regulatory agencies governing nursing, physician assistants, home health care, primary care, or others has been made aware of the community paramedicine program but has not confirmed that the program is operating within state regulations.</p> <p><b>3.</b> The regulatory agencies governing nursing, physician assistants, home health care, primary care, or others have approved the community paramedicine program on a "pilot" or other restricted basis.</p> <p><b>4.</b> The regulatory agencies governing nursing, physician assistants, home health care, primary care, or others have approved the community paramedicine program without any restrictions.</p> <p><b>5.</b> Specific statutes, rules, and regulations govern community paramedicine programs statewide.</p>

**Benchmark 202:** *Community paramedicine program leaders (sponsoring agency, community paramedicine personnel, and/or other stakeholders) use a process to establish, maintain, and constantly evaluate and improve a community paramedicine program in cooperation with medical, payer, professional, governmental, regulatory, and citizen organizations.*

Indicator	Scoring
<p><b>202.1</b> The program leaders have developed and implemented a multidisciplinary, multi-agency advisory committee to provide overall guidance to the community paramedicine planning and implementation strategies. The committee meets regularly and is in compliance with local or state open-meeting or transparency regulations and protects patient privacy.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no community-wide multidisciplinary, multi-agency advisory committee providing guidance to the program leadership in planning and developing a community paramedicine program.</p> <p><b>2.</b> There is no community-wide multidisciplinary, multi-agency advisory committee and attempts to organize one have not been successful but are continuing.</p> <p><b>3.</b> There is a community-wide multidisciplinary, multi-agency advisory committee, but its meetings are infrequent and guidance to the community paramedicine program is not always sought or available. Collaborative working arrangements are not apparent.</p> <p><b>4.</b> There is a community-wide multidisciplinary, multi-agency advisory committee. Committee members and stakeholders regularly attend meetings. Collaboration and consensus concerning the role and direction of the community paramedicine program are beginning.</p> <p><b>5.</b> There is a community-wide multidisciplinary, multi-agency advisory committee with well-defined goals and responsibilities relative to the development and oversight of the community paramedicine program that meets regularly. The committee routinely provides guidance and assistance to the community paramedicine program on system and program issues. There is strong evidence of consensus building among system participants. The committee is in compliance with all open meeting or transparency regulations and protects patient privacy.</p>

Indicator	Scoring
<p><b>202.2</b> A clearly defined and easily understood structure is in place for the community paramedicine program decision-making process at the local administrative level to continually improve the program.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no defined decision-making process (written policy and procedure) regarding the community paramedicine program within the sponsoring agency or its committees.</p> <p><b>2.</b> There is an unwritten decision-making process that stakeholders use when convenient, although not regularly or consistently.</p> <p><b>3.</b> The decision-making process is articulated within the community paramedicine program plan, although it has not been fully implemented. Policies are not written.</p> <p><b>4.</b> The decision-making process is contained within the community paramedicine program plan, and there are current policies and procedures in place to guide decision making. Use of the decision-making process is infrequent.</p> <p><b>5.</b> There is a clearly defined process for making decisions affecting the community paramedicine program. The process is articulated in the community paramedicine program plan and is further identified within system policies. Stakeholders know and understand the process and use it to resolve issues and to improve the program.</p>

<b>Indicator</b>	
<p><b>202.3</b> Community paramedicine program leaders have adopted and use goals and objectives that are specific, measurable, attainable, realistic, and timely for the community paramedicine program.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There are no goals or time-specific, quantifiable, and measurable objectives for the community paramedicine program.</p> <p><b>2.</b> Community paramedicine program leaders have met to discuss time-specific, quantifiable goals.</p> <p><b>3.</b> Community paramedicine program leaders are beginning the process of identifying measurable program goals and outcome-based, time-specific, quantifiable, and measurable objectives.</p> <p><b>4.</b> Community paramedicine program leaders have adopted goals and time-specific, quantifiable, and measurable objectives that guide program performance.</p> <p><b>5.</b> Community paramedicine program leaders, in consultation with their community-wide multidisciplinary, multi-agency advisory committee, have established measurable program goals and outcome-based, time-specific, quantifiable, and measurable objectives that guide system effectiveness and program performance.</p>
<p><b>202.4</b> The community paramedicine program has comprehensive protocols that guide personnel to ensure consistency of care delivered, to decrease unwarranted variation in care, and to ensure patient care activities remain within scope of practice boundaries.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There are no protocols to guide community paramedicine personnel.</p> <p><b>2.</b> Community paramedicine personnel operate under the protocols for general emergency care response as approved by the agency's medical director.</p> <p><b>3.</b> Specific protocols for community paramedicine activities that are outside of the general emergency care response activities of the agency are being drafted.</p> <p><b>4.</b> Specific protocols for community paramedicine activities have been drafted and are undergoing review.</p> <p><b>5.</b> Specific protocols for community paramedicine activities have been formally adopted and guide the assessment and treatment of patients/clients and serve as a basis for ongoing performance improvement.</p>

Indicator	Scoring
<p><b>202.5</b> The community paramedicine program assures confidential (HIPAA compliant) two-way communication of patient care records related to the program's care between the program providers and the affiliated hospital/physician/medical home providers.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> No formal exchange of patient/client information occurs between community paramedicine and other health care providers.</p> <p><b>2.</b> There is an informal, one way transmission of health care information from the community paramedicine providers and other health care providers and entities.</p> <p><b>3.</b> There is a formal written policy that governs the one way transmission of health care information from the community paramedicine providers and other health care providers and entities.</p> <p><b>4.</b> There is informal, two way transmission of health care information between community paramedicine and other health care providers and entities.</p> <p><b>5.</b> There is a formal written policy, HIPAA compliant, that governs the two way transmission of health care information between community paramedicine and other health care providers. Community paramedicine personnel have received specific training in HIPAA compliance.</p>

Indicator	Scoring
<p><b>202.6</b> The exchange of data and any peer review or performance improvement processes are protected from discoverability.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> The community paramedicine program does not engage in any peer review or performance improvement activity.</p> <p><b>2.</b> The community paramedicine program conducts peer review and performance improvement under the rules and regulations pertaining to such protection for traditional EMS activities. There is no formal engagement with other health care providers in these activities.</p> <p><b>3.</b> The community paramedicine personnel actively engage in multi-disciplinary, multi-agency peer review under the rules and regulations pertaining to such protection for traditional EMS activities.</p> <p><b>4.</b> Multi-disciplinary, multi-agency peer review including community paramedicine personnel is conducted at a non-EMS location, e.g. hospital, under the protection from discoverability outlined for that entity.</p> <p><b>5.</b> Specific peer review and performance improvement protection exist in state statute, rule, or regulation for multi-disciplinary, multi-agency peer review including community paramedicine personnel.</p>



**Benchmark 203:** *The community paramedicine program has a comprehensive written plan based on community needs. The plan integrates the community paramedicine program with all aspects of community health including, but not limited to: EMS, public health, primary care, hospitals, psychiatric medicine, social service and other key providers. The written community paramedicine program plan is developed in collaboration with community partners and stakeholders.*

Indicator	Scoring
<p><b>203.1</b> Community paramedicine program, in concert with a multidisciplinary, multi-agency advisory committee, has adopted a community paramedicine program plan.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no community paramedicine program plan, and one is not in progress.</p> <p><b>2.</b> There is no community paramedicine program plan, although some individuals or groups have begun meeting to discuss the development of a community paramedicine program plan.</p> <p><b>3.</b> A community paramedicine program plan was developed and adopted by the sponsoring agency. The plan, however, has not been endorsed by community paramedicine stakeholders.</p> <p><b>4.</b> A community paramedicine program plan has been adopted, developed with a multidisciplinary, multi-agency advisory committee, and has been endorsed by the respective agencies.</p> <p><b>5.</b> A comprehensive community paramedicine program plan has been developed, adopted in conjunction with community stakeholders, and includes the integration of other systems (e.g., EMS, public health, community health, and primary care).</p>

Indicator	Scoring
<p><b>203.2</b> The community paramedicine program plan clearly describes the system design (including the components necessary to have an integrated program) and is used to guide system implementation and management. For example, the plan includes references to regulatory standards and documents and includes methods of data collection and analysis.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no community paramedicine program plan.</p> <p><b>2.</b> The community paramedicine program plan does not address or incorporate the parallel and convergent resources (prehospital, communication, transportation, acute care, rehabilitation, and others), nor is it inclusive of all-hazards preparedness or public health/community health integration.</p> <p><b>3.</b> The community paramedicine program plan provides general information about all the program activities including all-hazards preparedness, EMS, and public health/community health integration; however, it is difficult to determine who is responsible and accountable for the community paramedicine programs performance and implementation.</p> <p><b>4.</b> The community paramedicine program plan addresses every component of a well-organized and functioning program including all-hazards preparedness and public health/community health integration. Specific information on each component is provided, and the program design is inclusive of providing for specific goals and objectives for system performance.</p> <p><b>5.</b> The community paramedicine program plan is used to guide system implementation and management. Stakeholders and policy leaders are familiar with the plan and its components and use the plan to monitor system progress and to measure results.</p>

**Benchmark 204:** *Sufficient resources, including those both financial and infrastructure related, support program planning, implementation, and maintenance.*

Indicator	Scoring
<p><b>204.1</b> The community paramedicine program plan clearly identifies the human resources and equipment necessary to develop, implement, and manage the community paramedicine program both clinically and administratively.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no method of assessing available resources or of identifying resource deficiencies in either the clinical or administrative areas of the community paramedicine program.</p> <p><b>2.</b> The community paramedicine program plan addresses resource needs and identifies gaps in resources within the community health system, but no mechanism for correcting resource deficiencies has been identified.</p> <p><b>3.</b> Resource needs are identified, and a draft plan, inclusive of goals and timelines, has been prepared to address the resource needs. The plan has not been implemented.</p> <p><b>4.</b> Resource needs are clearly identified, and action plans are being implemented to correct deficiencies in both clinical areas and administrative support functions.</p> <p><b>5.</b> A resource assessment survey has been completed and is incorporated into the community paramedicine program plan. Goals and measurable objectives to reduce or eliminate resource deficiencies have been implemented. Evaluation of progress on meeting resource needs is evident and, when necessary, the plan has been adapted.</p>

Indicator	Scoring
<p><b>204.2</b> Financial resources exist that support the planning, implementation, and ongoing management of the administrative and clinical care components of the community paramedicine program.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no funding to support the community paramedicine program planning, implementation, or ongoing management and operations for either program administration or community paramedicine clinical care.</p> <p><b>2.</b> Some funding for the community paramedicine program has been identified, e.g. grants, but ongoing support for administration and clinical care outside of the third-party reimbursement structure is not available.</p> <p><b>3.</b> There is current funding for the development of the community paramedicine program within the sponsoring agency organization consistent with the community paramedicine program plan, but costs to support clinical care support services have not been identified (transportation, communication, uncompensated care, standby fees, and others). No ongoing commitment of funding has been secured.</p> <p><b>4.</b> There is funding available for both administrative and clinical components of the community paramedicine program plan. A mechanism to assess needs among various activities has begun. Implementation costs and ongoing support costs of the sponsoring agency have been addressed within the plan.</p> <p><b>5.</b> A stable (consistent) source of reliable funding for the development, operations, and management of the community paramedicine program (clinical care and lead agency administration) has been identified and is being used to support planning, implementation, maintenance, and ongoing program enhancements.</p>

Indicator	Scoring
<p><b>204.3</b> Operational budgets (program administration and operations and in-field operations) are aligned with the community paramedicine program plan and priorities.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There are no operational budgets.</p> <p><b>2.</b> There are limited operational budgets not sufficient to cover related program costs for the EMS system.</p> <p><b>3.</b> There are operational budgets that may be sufficient to cover most program costs, but they are without regard to the community paramedicine program plan or priorities.</p> <p><b>4.</b> There are operational budgets that have some ties to the community paramedicine program plan and that include consideration for the extraordinary costs to the system (e.g. providers).</p> <p><b>5.</b> An operational budget exists for each component in the plan and matches system needs and priorities with program and operational expenditures.</p>

**Benchmark 205:** *Collected data are used to evaluate system performance and to develop public policy.*

Indicator	Scoring
<p><b>205.1</b> The community paramedicine program electronic information systems (EIS) is used to assess system performance, to measure system compliance with applicable standards, and to allocate program resources to areas of need or to acquire new resources.</p>	<ul style="list-style-type: none"> <li><b>0.</b> Not known.</li> <li><b>1.</b> There is no community paramedicine EIS.</li> <li><b>2.</b> There is a limited community paramedicine EIS consisting of a patient registry, but no data extraction is used to identify resource needs, to establish performance standards, or to routinely assess and evaluate program effectiveness.</li> <li><b>3.</b> There is a community paramedicine EIS that routinely reports (written, on-line, or electronic) on system-wide management performance and compliance. Linkage between management reports, resource utilization, and performance measures has begun.</li> <li><b>4.</b> Routine community paramedicine EIS reports are issued at the community as well as at the provider level. Reports focus on management strengths, compliance with standards, and resource utilization. Trends are used to improve system efficiency and performance.</li> <li><b>5.</b> Community paramedicine EIS reports are used extensively to improve and report on program performance. The sponsoring agency issues regular and routine reports to providers. Program leaders assess reports to determine deficiencies and to allocate resources to areas of greatest need. Program performance and standard compliance are assessed and reported.</li> </ul>

Indicator	Scoring
<p><b>205.2</b> Continuing education for community paramedicine providers is developed based on review and evaluation of EIS data.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no correlation between training programs for providers and the community paramedicine EIS.</p> <p><b>2.</b> There is limited use of community paramedicine EIS reports to target educational opportunities.</p> <p><b>3.</b> There is evidence that some providers are using community paramedicine EIS reports to identify educational needs and to incorporate them into training programs.</p> <p><b>4.</b> Many educational forums have been conducted based on an analysis of the performance data in the community paramedicine EIS. Clear ties link education of providers with identified areas of need from the EIS reports.</p> <p><b>5.</b> Routine analysis of community paramedicine information and educational opportunities is being conducted. Integrated program objectives tying program performance and education are implemented and routinely evaluated. Regular updates to community paramedicine information and education are available. Community paramedicine EIS data are used to measure outcomes and effectiveness.</p>

Indicator	Scoring
<p><b>205.3</b> Community paramedicine leaders, including the multidisciplinary, multi-agency advisory committee, regularly review system performance reports and system compliance information to monitor community paramedicine program performance and to determine the need for program modifications.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no community paramedicine specific multidisciplinary, multi-agency advisory committee, and there are no regular reports of system performance.</p> <p><b>2.</b> There is a community paramedicine program community-wide multidisciplinary, multi-agency advisory committee, but it does not routinely review program data reports.</p> <p><b>3.</b> The community paramedicine program community-wide multidisciplinary, multi-agency committee meets regularly and reviews process-type reports; no critical assessment of program performance has been completed.</p> <p><b>4.</b> The community paramedicine program community-wide multidisciplinary, multi-agency advisory committee meets regularly and routinely assesses reports from community paramedicine data to determine program compliance and operational issue needing attention.</p> <p><b>5.</b> The community paramedicine program community-wide multidisciplinary, multi-agency advisory committee and related stakeholder groups meet regularly and review data reports to assess program performance over time looking for ways to improve effectiveness and patient outcomes.</p>



**Benchmark 206:** *The community paramedicine, EMS, public health, community health, and primary care systems are closely linked and working toward a common goal.*

Indicator	Scoring
<p><b>206.1</b> The community paramedicine program, EMS, public health and community health system, and primary care leaders have established linkages including programs with an emphasis on population-based public health surveillance and evaluation for acute and chronic disease prevention and health promotion.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> No community health risk assessments are conducted.</p> <p><b>2.</b> Community paramedicine program officials conduct health risk assessments; however, there is no involvement of EMS, community health, public health, or primary care officials in those assessments.</p> <p><b>3.</b> Public health/community health officials along with EMS, primary care providers, and community paramedicine participants assist with the design of community risk assessments.</p> <p><b>4.</b> Public health/community health officials along with EMS, primary care providers, and community paramedicine participants assist with the design and analysis of community risk assessments.</p> <p><b>5.</b> The public health/community health epidemiologist along with EMS, primary care providers, and community paramedicine participants is involved in the development of risk assessment reports. There is clear evidence of data sharing, data linkage, and well-defined reporting roles and responsibilities.</p>

### 300: Assurance

Assurance to constituents that services necessary to achieve agreed-on goals are provided by encouraging actions of others (public or private), requiring action through regulation, or providing services directly.

**Benchmark 301:** *The electronic information system (EIS) is used to facilitate ongoing assessment and assurance of system performance and outcomes and provides a basis for continuously improving the community paramedicine.*

Indicator	Scoring
<b>301.1</b> The community paramedicine program collects and uses patient data as well as provider data to assess system performance and to improve quality of care.	<b>0.</b> Not known. <b>1.</b> Patient care data are not collected electronically by the program. <b>2.</b> Patient care data are collected electronically but are not used to assess system performance or quality of care. <b>3.</b> Patient care data are collected electronically and are used to assess system performance. <b>4.</b> Patient care data are collected electronically and are used to assess both system performance and to improve quality of care across the program. <b>5.</b> Patient care data are used to identify and meet additional health care/social welfare needs as they are identified.

Indicator	Scoring
<p><b>301.2</b> Community paramedicine care providers collect patient care and administrative data for each episode of care and provide these data to the community paramedicine program which is evaluated including monitoring trends and identifying outliers.</p>	<p><b>0.</b> Not known.</p> <ol style="list-style-type: none"> <li><b>1.</b> There is no jurisdiction-wide community paramedicine data collection.</li> <li><b>2.</b> Community paramedicine providers have a patient care record for each episode of care, but it is not yet automated or integrated with the community paramedicine EIS.</li> <li><b>3.</b> The community paramedicine patient care record electronically captures patient care provided by field personnel and can be transferred or entered into the community paramedicine EIS.</li> <li><b>4.</b> The community paramedicine patient data system is integrated into the community paramedicine EIS and is used by community paramedicine and other health care personnel to review and evaluate community paramedicine system performance.</li> <li><b>5.</b> The community paramedicine patient data system is fully integrated with all affiliated health care entities and with the public health surveillance system to help monitor community health needs.</li> </ol>

**Benchmark 302:** *The financial aspects of the community paramedicine program are integrated into the overall performance improvement system to ensure ongoing “fine-tuning” and cost-effectiveness.*

Indicator	Scoring
<p><b>302.1</b> Cost data are collected and provided to the community paramedicine program EIS for each major component of the program.</p>	<ul style="list-style-type: none"> <li><b>0.</b> Not known.</li> <li><b>1.</b> No cost data are collected.</li> <li><b>2.</b> Administrative and program cost data are collected and included in the annual community paramedicine program report.</li> <li><b>3.</b> In addition to administrative and program costs, clinical charges and costs are included in one or more major component areas and are provided to the community paramedicine EIS for inclusion in the annual community paramedicine program report.</li> <li><b>4.</b> The costs associated with individual system components, for example, home visitation, can be determined and are provided to the EIS registry for inclusion in the annual community paramedicine program report.</li> <li><b>5.</b> The cost of an aggregate system can be determined and is provided to the system registry for inclusion in the annual community paramedicine program report.</li> </ul>
<p><b>302.2</b> Cost, charge, collection, and reimbursement data are aggregated with other data sources including insurers and data system costs and are included in annual community paramedicine program reports.</p>	<ul style="list-style-type: none"> <li><b>0.</b> Not known.</li> <li><b>1.</b> No outside financial data are captured.</li> <li><b>2.</b> Outside financial data are collected from one or more sources (e.g. Medicaid or private insurers).</li> <li><b>3.</b> Extensive financial data, for example, cost, charge, collection, and reimbursement, are routinely collected from the hospital, registry data, or more sources. Sufficient expertise is available to the community paramedicine program to analyze and report complex fiscal data.</li> <li><b>4.</b> Outside financial data are combined with internal community paramedicine program data and are used to estimate total program costs.</li> <li><b>5.</b> Outside financial data are combined with internal community paramedicine program data and are used to estimate total system costs. These financial data are described in detail in the annual community paramedicine program report.</li> </ul>

Indicator	Scoring
<p><b>302.3</b> Financial data are combined with other cost, outcome, or surrogate measures, for example, avoidance of EMS transports, avoidance of hospital visits, improved wellness measures, and others, to estimate and track true system costs and cost benefits.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> No nonfinancial burden of disease costs and outcome measures are collected or modeled.</p> <p><b>2.</b> Estimated savings using various burdens of disease costs or outcome measure models are calculated for all community paramedicine programs.</p> <p><b>3.</b> Estimated savings using various burdens of disease costs or outcome measure models are calculated for actual community paramedicine program costs.</p> <p><b>4.</b> Estimated savings using various burdens of disease costs or outcome measure models are calculated for all community paramedicine programs and activities and are combined with other system cost data to determine costs and savings of the total system.</p> <p><b>5.</b> Estimated savings using various burdens of disease costs or outcome measure models are calculated for all community paramedicine programs and activities, are combined with actual system cost data to determine costs and savings of the total system, and are described in detail in the annual community paramedicine program report.</p>

**Benchmark 303:** *The community paramedicine program ensures competent medical oversight.*

Indicator	Scoring
<p><b>303.1</b> There is authority for a community paramedicine medical director and a clear job description, including requisite education, training, and certification, for this position.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no requirement for a community paramedicine program medical director, and no job description has been developed.</p> <p><b>2.</b> There is an EMS agency medical director that serves as medical director for the community paramedicine program, but no job description or expectations have been formally developed beyond those required of an EMS agency medical director.</p> <p><b>3.</b> There is authority for a community paramedicine program medical director, a job description, and expectations have been developed. This individual may or may not also serve as the EMS agency medical director.</p> <p><b>4.</b> There is authority for a community paramedicine program medical director, and the job description, including requisite education, training, and certification for the community paramedicine program medical director, is clear. A physician appropriately credentialed has been hired, and the job classification is routinely assessed for appropriateness of the duties required.</p> <p><b>5.</b> If separate individuals, the EMS agency medical director and CP program medical director regularly meet together with program leadership to coordinate and integrate the EMS and CP aspects of the agency's services.</p>

**Benchmark 304:** *The community paramedicine program is supported by an EMS system that includes communications, medical oversight, and transportation; the community paramedicine program, EMS system, and public health and community health agencies are well integrated.*

Indicator	Scoring
<p><b>304.1</b> There is clear-cut legal authority and responsibility for the community paramedicine program medical director including the authority to adopt protocols, implement a performance improvement system, ensure appropriate practice of community paramedicine providers, and generally ensure medical appropriateness of the community paramedicine program based on regulatory agency scope of practice and accepted standards of medical care.</p>	<ul style="list-style-type: none"> <li><b>0.</b> Not known.</li> <li><b>1.</b> There is no community paramedicine program medical director.</li> <li><b>2.</b> There is a community paramedicine program medical director with a written job description; however, the individual has no specific legal authority or time allocated for those tasks.</li> <li><b>3.</b> There is a community paramedicine program medical director with a written job description. The community program medical director has adopted protocols, implemented a performance improvement program, and is generally taking steps to improve the medical appropriateness of the community paramedicine program.</li> <li><b>4.</b> There is a community paramedicine program medical director with a written job description and whose specific legal authorities and responsibilities are formally granted by law or by administrative rule.</li> <li><b>5.</b> There is written evidence that the community paramedicine program medical director has, consistent with the formal authority, adopted protocols, implemented a performance improvement program, is restricting the practice of community paramedicine program providers (if indicated), is making significant efforts to improve the medical appropriateness of the community paramedicine program, and is working to fully integrate the program into the community health/primary care systems. Sufficient resources have been allocated for the medical director's participation and oversight to ensure that an appropriate amount of his/her time is dedicated to program responsibilities.</li> </ul>

**Benchmark 305:** *The community paramedicine program ensures a competent and safe workforce.*

Indicator	Scoring
<p><b>305.1</b> In cooperation with the prehospital certification and licensure authority, established guidelines exist for community paramedicine personnel for initial and ongoing training including community paramedicine specific courses.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There are no community paramedicine training guidelines for prehospital personnel as part of initial or ongoing certification or licensure.</p> <p><b>2.</b> Some community paramedicine personnel have completed initial training using a state, national, or internationally accepted community paramedicine curriculum.</p> <p><b>3.</b> All community paramedicine personnel that provide medical services to patients/clients have completed initial training using a state, national, or internationally accepted community paramedicine curriculum.</p> <p><b>4.</b> The program has established continuing education (CE) requirements for all community paramedicine program providers that are specific to community paramedicine program skills. These CE requirements exceed the CE courses for EMS personnel in time required and must cover topics specific to the community paramedicine program.</p> <p><b>5.</b> The community paramedicine program CE requirements are based upon identified knowledge or competency gaps in providers, are specific to address these gaps, and are altered over time to address newly identified gaps.</p>



Indicator	Scoring
<p><b>305.2</b> The community paramedicine program has established, with oversight by the medical director, a credentialing process that assures each community paramedicine provider has proven competence in performing the skills within the scope of practice.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no credentialing process for community paramedicine personnel.</p> <p><b>2.</b> A written credentialing process has been developed that assures that the community paramedicine program is staffed by professional, reasonable, and well-trained individuals. This includes documentation of appropriate background checks and successful completion of required educational programs.</p> <p><b>3.</b> A credentialing process documents evaluation of competence performing at least three skills that are specific to the community paramedicine program beyond the skills of an EMS provider within the agency.</p> <p><b>4.</b> A credentialing process evaluates each community paramedicine program provider including a structured assessment of competence, professionalism, interpersonal communications skills, medical care, and system-based integration of healthcare resources.</p> <p><b>5.</b> In addition to local credentialing, state and/or national recognition in the form of certification or licensure has been attained for all community paramedicine personnel.</p>

Indicator	Scoring
<p><b>305.3</b> Conduct at least one multidisciplinary community paramedicine/community health conference annually that encourages system and team approaches to community health.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There are no multidisciplinary community paramedicine conferences conducted within geographic boundaries of the community.</p> <p><b>2.</b> There are sporadic multidisciplinary community paramedicine conferences conducted.</p> <p><b>3.</b> Multidisciplinary community paramedicine conferences are conducted occasionally, and attendance by community paramedicine practitioners is monitored and reviewed.</p> <p><b>4.</b> Multidisciplinary community paramedicine conferences are conducted at least annually.</p> <p><b>5.</b> Multidisciplinary (EMS, physicians, nurses, physiatrists, policy makers, consumers, and others) community paramedicine conferences are conducted regularly, new findings from quality assurance and performance improvement processes are shared, and the conferences are open to all practitioners within the system. Regular attendance is required.</p>
<p><b>305.4</b> There are mechanisms within the system performance improvement processes to identify and correct systemic personnel deficiencies within the community paramedicine program.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no mechanism to identify through performance improvement processes systemic personnel deficiencies within the community paramedicine program.</p> <p><b>2.</b> The community paramedicine program has begun to identify systemic personnel deficiencies.</p> <p><b>3.</b> The community paramedic program has a mechanism to identify systemic personnel deficiencies and is working on a process for corrective action.</p> <p><b>4.</b> The community paramedic program has a mechanism to identify systemic personnel deficiencies and is instituting corrective actions across the program.</p> <p><b>5.</b> Community paramedicine leadership and other stakeholders, including hospitals and the lead agency, monitor and correct personnel deficiencies as identified through quality assurance and performance improvement processes. A method of corrective action has been instituted, and appropriate follow-up is occurring. Monitoring of program deficiencies and corrective actions is ongoing.</p>

Indicator	Scoring
<p><b>305.5</b> There are mechanisms in place within agency and institutional performance improvement processes to identify and correct deficiencies in practice patterns of individual practitioners within the community paramedicine programs.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no mechanism in place to routinely assess the deficiencies in community paramedicine practice patterns of individual practitioners.</p> <p><b>2.</b> The community paramedicine program has begun a process to evaluate deficiencies in practice patterns of individual practitioners.</p> <p><b>3.</b> A mechanism is in place to monitor and report on deficiencies in practice patterns of individual practitioners within the community paramedicine program. The process is evolving as part of the quality assurance and performance improvement processes.</p> <p><b>4.</b> There is a well-defined process to assess care provided by practitioners within the community paramedicine program. The quality assurance and performance improvement processes identify deficiencies, and corrective action plans are instituted.</p> <p><b>5.</b> Practice patterns of individual practitioners performing outside the standards of care are routinely assessed by the medical director and sponsoring agency. Corrective actions (training, additional education, and disciplinary), as appropriate, are instituted, and trends are monitored and reported to the sponsoring agency and/or other licensing agency.</p>

**Benchmark 306:** *The program acts to protect the public welfare by enforcing various laws, rules, and regulations as they pertain to the community paramedicine program.*

Indicator	Scoring
<p><b>306.1</b> The program works in conjunction with the prehospital and other regulatory agencies to ensure that community paramedical care provided by licensed individuals is in compliance with any rules, regulations, or protocols specific to community paramedicine delivery.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> There is no evidence that the community paramedicine sponsoring agency and the prehospital regulatory agency work together to ensure appropriate provider agency licensure and compliance.</p> <p><b>2.</b> The community paramedicine sponsoring agency refers complaints concerning issues of prehospital agency performance to the prehospital regulatory agency.</p> <p><b>3.</b> The community paramedicine sponsoring agency and the prehospital regulatory agency work together to resolve complaints involving prehospital personnel performance.</p> <p><b>4.</b> The community paramedicine sponsoring and the prehospital regulatory agency work together to monitor compliance of prehospital providers with any rules, regulations, or protocols specific to prehospital practice.</p> <p><b>5.</b> The prehospital regulatory agency, working cooperatively with the community paramedicine sponsoring agency, is involved in ongoing community paramedicine program performance improvement processes and prehospital provider compliance with any rules, regulations, or protocols specific to prehospital practice.</p>

Indicator	Scoring
<p><b>306.2</b> The program refers issues of personnel noncompliance with laws, rules, and regulations to appropriate boards or licensure authorities.</p>	<p><b>0.</b> Not known.</p> <p><b>1.</b> Individual personnel performance is not monitored.</p> <p><b>2.</b> Complaints about individual personnel noncompliance with laws, rules, and regulations go directly to appropriate boards or licensure authorities.</p> <p><b>3.</b> Community paramedicine sponsoring agency personnel collaborate actively with licensure authorities to resolve complaints involving individual personnel noncompliance with laws, rules, and regulations governing community paramedicine personnel.</p> <p><b>4.</b> Individual personnel performance issues are addressed within community paramedicine program's performance improvement processes unless they involve breaches of State or Federal statute.</p> <p><b>5.</b> Appropriate boards or licensure authorities are involved in the system performance improvement processes addressing individual personnel performance issues.</p>

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# Appendix A: Program Information Worksheet

This descriptive information serves as a program summary and will be useful as a source of data for State and Federal agencies and organizations interested in community paramedicine programs. It is suggested that the form be completed, updated at least annually, and kept on file as a resource to provide other entities who may request summary information concerning your program.

Name of Program: \_\_\_\_\_

Program Location (city, state): \_\_\_\_\_

Where does the Program Operate?:       Urban     Rural

Program Sponsor/Agency: \_\_\_\_\_

Agency Type: \_\_\_\_\_

Population Served: \_\_\_\_\_

Description of Program (What services do you provide): \_\_\_\_\_

\_\_\_\_\_

Number of Community Paramedics in Program: \_\_\_\_\_

Call Volume (Indicate whether daily/monthly/annually): \_\_\_\_\_

Program Start Date (Month/Year): \_\_\_\_/\_\_\_\_

Continuous Operation Since Start:       Yes       No

If No, What Caused the Interruption: \_\_\_\_\_

\_\_\_\_\_

How is the Program Funded/Supported: (check all that apply)

- Agency funds
- Grant support
- 3<sup>rd</sup> party payers
- Tax revenue
- Other (describe) \_\_\_\_\_

Who is the community paramedicine program Medical Director:

\_\_\_\_\_

Who is the EMS agency medical director (if different): \_\_\_\_\_

Under what state or local authority does the program operate:

\_\_\_\_\_

Healthcare Affiliations:

Contracted health plans/insurers: \_\_\_\_\_

Contracted hospitals: \_\_\_\_\_

Contracted physician practices/medical homes: \_\_\_\_\_

\_\_\_\_\_

Other contracted healthcare organizations (home health agencies, etc):

\_\_\_\_\_



## Appendix B: Definitions

*Accountable Care Organization:* Teams of doctors, hospitals, and other health care providers and suppliers working together

*Benchmarks:* Global overarching goals, expectations, or outcomes. In the context of the community paramedicine program, a benchmark identifies a broad system attribute.

*Certification:* The issuing of certificates by a private agency based upon standards adopted by that agency that are usually based upon minimum competence.

*Community Paramedic:* A state licensed EMS professional that has completed a formal internationally standardized Community Paramedic educational program through an accredited college or university and has demonstrated competence in the provision of health education, monitoring and services beyond the roles of traditional emergency care and transport, and in conjunction with medical direction. The specific roles and services are determined by community health needs and in collaboration with public health and medical direction.

*Community Paramedicine:* An organized system of services, based on local need, which are provided by EMTs and Paramedics integrated into the local or regional health care system and overseen by emergency and primary care physicians. This not only addresses gaps in primary care services, but enables the presence of EMS personnel for emergency response in low call-volume areas by providing routine use of their clinical skills and additional financial support from these non-EMS activities.

*Credentialing:* An institution's or individual's authority or claim of competence for a course of study or completion of objectives.

*EMS Professionals:* Paid or volunteer individuals who are qualified, by satisfying formalized existing requirements, to provide some aspect of care or service within the EMS system.

*EMS Professionals - Emergency Medical Technician (EMT):* Acting under the oversight of a medical director, an EMT “initiates immediate lifesaving care to critical patients”. EMT’s perform numerous tasks in the prehospital setting including, but not limited to, basic airway management, cervical spine immobilization, cardiopulmonary resuscitation, and bleeding control.

*EMS Professionals - Advanced Emergency Medical Technician (AEMT):* Acting under the oversight of a medical director, an AEMT builds upon the knowledge and skills of an EMT by expanding treatment utilized to patients in the prehospital setting. AEMT’s perform numerous tasks in addition to an EMT including, but not limited to, intravenous access and advanced airway management.

*EMS Professionals - Paramedic:* Acting under the oversight of a medical director, a Paramedic possesses “complex knowledge and skills necessary to provide patient care and transportation”. Paramedics perform numerous tasks including, but not limited to, intravenous access, advanced airway management, obtainment and interpretation of electrocardiograms, and administration of lifesaving medications.

*EMS Systems:* A comprehensive, coordinated arrangement of resources and functions organized to respond to medical emergencies in a timely manner.

*Health:* Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

*Indicators:* Those tasks or outputs that characterize the benchmark. Indicators identify actions or capacities within the benchmark. Indicators are the measurable components of a benchmark.

*International Roundtable on Community Paramedicine (IRCP):* An collaborative developed to promote the international exchange of information and experience related to the provision of flexible and reliable health care services to residents of rural and remote areas using novel health care delivery models, and to be a resource to public policy makers, systems managers, and others.

*Joint Committee on Rural Emergency Care (JCREC):* Joint committee between NASEMSO and NOSORH dedicated to advancing policy and practice to ensure access to timely, affordable, and high quality emergency care services in rural America.

*Licensure:* The act of a State granting an entity permission to do something that the entity could not legally do without such permission. Licensing is generally viewed by legislative bodies as a regulatory effort to protect the public from potential harm. In the health care delivery system, an individual who is licensed tends to enjoy a certain amount of autonomy in delivering health care services. Conversely, the licensed individual must satisfy ongoing requirements that ensure certain minimum levels of expertise. A license is generally considered a privilege and not a right.

*Medical Oversight:* Supervision of the medical aspects of systems designed to provide emergency care in the out-of-hospital setting.

*National Association of EMS Physicians (NAEMSP):* An organization of physicians and other professionals partnering to provide leadership and foster excellence in out-of-hospital emergency medical services.

*National Association of EMTs (NAEMT):* An organization of physicians and other professionals partnering to provide leadership and foster excellence in out-of-hospital emergency medical services.

*National Association of State EMS Officials (NASEMSO):* The lead national organization for EMS, a respected voice for national EMS policy with comprehensive concern and commitment for the development of effective, integrated, community-based, universal and consistent EMS systems.

*National EMS Information System (NEMSIS):* A nationally recognized prehospital patient care data standard, including comprehensive data dictionary and the supporting XML standard to ensure portability of the data; NEMSIS was developed to help states collect more standardized data elements and eventually submit data to a national EMS database.

*National Organization of State Offices of Rural Health (NOSORH)*: Organization established to help State Offices of Rural Health in their efforts to improve access to, and enhance the quality of, health care for America's 61 million rural citizens.

*National Registry of Emergency Medical Technicians (NREMT)*: A national certifying agency that establishes uniform standards for training and examination of personnel active in the delivery of emergency ambulance service.

*Scope of Practice*: Defined parameters of various duties or services that may be provided by an individual with specific credentials. Whether regulated by rule, statute, or court decision, it represents the limits of services an individual may legally perform.

*Scoring*: Breaks down the indicator into completion steps. Scoring provides an assessment of the current status and marks progress over time to reach a certain milestone.

*Standard Curriculum*: With goals and objectives to improve the quality of emergency medical care, the standard curriculum consists of core curriculum of minimum required information to be presented within each respective EMS certification levels.

## **Appendix C: Overview of the Community Paramedicine Programs Interviewed**

### **Fort Worth, Texas**

Name of Program: MedStar Community Health Program  
Active Dates: 2009 – Present  
Funding: Cost savings in reducing unnecessary 9-1-1 responses

Core Activities: The goal of the Community Health Program is to reduce the unneeded 9-1-1 calls and EMS transports that put strain on an already overloaded emergency system, provide the patient more appropriate health care (as opposed to the emergency room), as well as reducing overall healthcare costs. Since its' inception, it is estimated that the program has saved more than \$1.3 million in emergency room charges, and reduced 9-1-1 use by these patients by nearly 50 percent, saving nearly \$1 million in EMS charges.

### **San Francisco, California**

Name of Program: San Francisco Fire/EMS Homeless Outreach and Medical Emergency (HOME) Team  
Active Dates: 2004 – 2009  
Funding: City general fund

Core Activities: Originally conceived as a means to stop sending expensive EMS resources to repetitive, non-emergency calls. HOME Team members were veteran SFFD paramedics who had been selected and trained to be paramedic outreach workers. They were clinically experienced, empathetic and had good street sense from their tenure on the job.

HOME Team members concentrated on areas where high populations of chronically homeless people congregate. Team members were taught to motivate these people to accept care and treatment through a series of specialized interventional techniques. They started with a psychosocial assessment of the client's perceived needs. They asked the client's view of why he/she repeatedly calls 9-1-1. They assumed a positive and supportive role, but were more directive than traditional social work.

The program is not currently operating due to a funding shortage.

### **Scott County, Minnesota**

Name of Program: Scott County Community Paramedicine  
Active Dates: 2008 – 2010; 2011 – Present  
Funding: Grants and 3<sup>rd</sup> party payers

Core Activities: Free fixed and mobile clinics to reduce inappropriate use of 9-1-1 resources. Community paramedics have been primarily used in the mobile clinic. They've seen between 300-400 patients who have visited the clinic for various reasons. The community paramedics have also done clinical work with the physician medical director and other providers.

The program underwent a one year hiatus in the absence of funding. Minnesota recently passed legislation that will allow community paramedic programs to bill for their services.

### **University of Pittsburgh, Pennsylvania**

Name of Program: Emed Health  
Active Dates: 1997 – Present  
Funding: University Health Plan, 3<sup>rd</sup> party payers

Core Activities: Emed Health promotes prevention and disease management using emergency medical service (EMS) agencies and their personnel to deliver community, emergency department and home-based prevention and disease management services. Community paramedics have immunized more than 50,000 people since start and have recently begun biometric screening. Trained paramedics have conducted those screenings on employees at university and other large employers with 30-40,000 screenings to date. They also have asthma prevention and fall prevention programs. A very successful component includes the Safe Landing program where community paramedics are sent out to homes to work with patients who have been discharged from the hospital. This occurs within 48 hours of discharge and community paramedics ensure that the patients understand discharge instructions and connect with their primary care provider to prevent readmission.

### **Vail, Colorado**

Name of Program: Western Eagle County Ambulance District – Community Paramedicine  
Active Dates: 2009 – 2010; 2011 – Present  
Funding: Grant funds

Core Activities: Patients are referred to emergency medical services personnel by their primary care physician to receive services in the home, including hospital discharge follow-up, blood draws, medication reconciliation and wound care. The program will initially operate with two specially trained community paramedics who will coordinate with the referring physician to ensure quality of care and appropriate oversight. In addition, paramedics will work with Eagle County's Public Health Department to provide preventative services throughout the community.

This program underwent a several month hiatus to resolve regulatory issues with state agencies.

## Appendix D: Additional Resources

### **Rural and Frontier EMS Agenda for the Future:**

<http://www.ruralcenter.org/sites/default/files/rfemsagenda.pdf>

**HRSA Model Trauma System Planning and Evaluation:** The complete report can be found at: <http://www.ncdhhs.gov/dhsr/EMS/trauma/pdf/hrsatraumamodel.pdf>. The Trauma System Self-Assessment Supplemental Tool: Benchmarks, Indicators, and Scoring can be found at: [http://www.publicsafety.ohio.gov/links/ems\\_self\\_assessment\\_tool.pdf](http://www.publicsafety.ohio.gov/links/ems_self_assessment_tool.pdf)

**International Roundtable on Community Paramedicine (IRCP):** The IRCP promotes the international exchange of information and experience related to the provision of flexible and reliable health care services to residents of rural and remote areas using novel health care delivery models and to be a resource to public policy makers, systems managers, and others. <http://www.ircp.info>

**Joint Committee on Rural EMS Care (JCREC):** In 2009 the National Association of State EMS Officials (NASEMSO) and National Organization of State Offices of Rural Health (NOSORH) created a Joint Committee on Rural Emergency Care (JCREC). This Committee is dedicated to advancing policy and practice to ensure access to timely, affordable, and high quality emergency care services in rural America.

State Perspectives Discussion Paper on Development of Community Paramedic Programs: [http://www.ruralcenter.org/sites/default/files/community\\_paramedic\\_programs.pdf](http://www.ruralcenter.org/sites/default/files/community_paramedic_programs.pdf)

**Community Paramedicine Insight Forum (CPIF):** The Community Paramedicine Insights Forum (CPIF) is a project sponsored by the Joint Committee on Rural Emergency Care (of the National Association of State EMS Officials and the National Organization of State Offices of Rural Health) and the Center for Leadership, Innovation and Research in EMS (CLIR). It is intended to serve as a regular meeting place, educational opportunity and discussion group for those folks trying to establish community paramedicine services or systems on a local, regional or statewide basis.

<http://cpif.communityparamedic.org>

## **Appendix E: Project Team**

Minnesota – Community Paramedicine Program

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National Association of Emergency Medical Technicians

Rod Barrett, BA, RN, NREMT-P

National Association of State EMS Officials

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Jim DeTienne, President – Elect, Chair JCREC

Douglas F. Kupas, MD, EMT-P, FACEP – Chairman EMS Medical Directors Council

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